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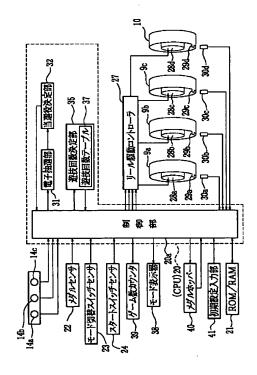
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(54) 【発明の名称】 遊技機及びプログラム及び記憶媒体

(57)【要約】

【課題】 特別遊技モードの構成を多様化する。

【解決手段】 遊技者がゲームを開始する際に、モード 選択ボタンを押圧すると、制御部20aは、遊技回数決 定部35に遊技回数決定信号を出力する。遊技回数決定 部35では遊技回数テーブル37を参照して、BBモー ドを構成するRBモードの入賞可能回数A及びRB移行 ゲームの遊技回数Bを決定する。なお、遊技回数テーブ ル37には、RBモードの入賞可能回数A及びBBモー ドのRB移行ゲームの遊技回数Bの組み合わせからなる テーブルデータから構成されており、これら組み合わせ のどれを選択してもBBモードで得られる純増メダル枚 数の上限値が一定になるように設定されている。これよ り、特別遊技モードの構成を多様化できるとともに、遊 技者の技量に関わらず所定枚数のメダルを得ることがで きる。



【特許請求の範囲】

【請求項1】 遊技開始手段の操作によりハズレ及び複数種類の当選役のうちのいずれかを決定する当選役決定手段と、リールごとに設けられたリール停止操作手段の操作に応答し、前記当選役決定手段で決められた当選役を構成する絵柄が同一の入賞ライン上で停止するように対応するリールの停止制御を行うリール停止制御手段とを備え、

前記当選役決定手段で決定された当選役が特別当選役で、且つその特別当選役を入賞させたときに、通常モードよりも利益付与確率が高くなる特別遊技モードでの遊技を行えるようにした遊技機において、

前記特別遊技モードを、複数回の役物遊技が連続して行われる連続役物モードから構成するとともに、前記役物遊技の遊技回数を決定する遊技回数決定手段を設けたことを特徴とする遊技機。

【請求項2】 遊技開始手段の操作によりハズレ及び複数種類の当選役のうちのいずれかを決定する当選役決定手段と、リールごとに設けられたリール停止操作手段の操作に応答し、前記当選役決定手段で決められた当選役を構成する絵柄が同一の入賞ライン上で停止するように対応するリールの停止制御を行うリール停止制御手段とを備え、

前記当選役決定手段で決定された当選役が特別当選役で、且つその特別当選役を入賞させたときに、通常モードよりも利益付与確率が高くなる特別遊技モードでの遊技を行えるようにした遊技機において、

前記特別遊技モードを、複数回の役物遊技が連続して行われる連続役物モードから構成するとともに、前記連続役物モードを構成する複数回の役物遊技での入賞可能回数を決定する入賞回数決定手段を設けたことを特徴とする遊技機。

【請求項3】 遊技開始手段の操作によりハズレ及び複数種類の当選役のうちのいずれかを決定する当選役決定手段と、リールごとに設けられたリール停止操作手段の操作に応答し、前記当選役決定手段で決められた当選役を構成する絵柄が同一の入賞ライン上で停止するように対応するリールの停止制御を行うリール停止制御手段とを備え

前記当選役決定手段で決定された当選役が特別当選役で、且つその特別当選役を入賞させたときに、通常モードよりも利益付与確率が高くなる特別遊技モードでの遊技を行えるようにした遊技機において、

前記特別遊技モードを、複数回の役物遊技が連続して行われる連続役物モードが少なくとも1回以上含まれるとともに、前記連続役物モードに移行させるための連続役物移行遊技が所定回数行われる連続役物増加モードから構成するとともに、前記連続役物移行遊技の遊技回数を決定する遊技回数決定手段を設けたことを特徴とする遊技機。

【請求項4】 遊技開始手段の操作によりハズレ及び複数種類の当選役のうちのいずれかを決定する当選役決定手段と、リールごとに設けられたリール停止操作手段の操作に応答し、前記当選役決定手段で決められた当選役を構成する絵柄が同一の入賞ライン上で停止するように対応するリールの停止制御を行うリール停止制御手段とを備え、

前記当選役決定手段で決定された当選役が特別当選役で、且つその特別当選役を入賞させたときに、通常モードよりも利益付与確率が高くなる特別遊技モードでの遊技を行えるようにした遊技機において、

前記特別遊技モードを、複数回の役物遊技が連続して行われる連続役物モードが少なくとも1回以上含まれるとともに、前記連続役物モードに移行させるための連続役物移行遊技が所定回数行われる連続役物増加モードから構成するとともに、前記当選役決定手段で決定された当選役が前記特別当選役のときに、前記連続役物モード中の役物遊技での入賞可能回数を決定する入賞回数決定手段を設けたことを特徴とする遊技機。

【請求項5】 前記遊技回数及び入賞回数は、前記特別遊技モードへ移行するまでの所定回数の遊技期間中に払い出された遊技媒体の個数と、遊技のために投入された遊技媒体の個数との個数差から決定されることを特徴とする請求項1~4いずれか記載の遊技機。

【請求項6】 前記遊技回数及び入賞回数は、前記特別 遊技モードへ移行するまでの所定回数の遊技期間中に払 い出された遊技媒体の個数に応じて決定されることを特 徴とする請求項1~4いずれか記載の遊技機。

【請求項7】 前記遊技回数及び入賞可能回数は、遊技の終了から遊技の開始までの期間内での遊技者の選択により行われることを特徴とする請求項1~4いずれか記載の遊技機。

【請求項8】 前記特別遊技モードでの払い出し期待値を、前記入賞可能回数又は前記遊技回数の少なくともいずれか一方と相補的となるように形成し、前記特別遊技モードでの払い出しを前記期待値に近づけるような制御を行うことを特徴とする請求項1~4又は7いずれか記載の遊技機。

【請求項9】 遊技開始手段の操作によりハズレ及び複数種類の当選役のうちのいずれかを決定する当選役決定手段と、リールごとに設けられたリール停止操作手段の操作に応答し、前記当選役決定手段で決められた当選役を構成する絵柄が同一の入賞ライン上で停止するように対応するリールの停止制御を行うリール停止制御手段と、前記当選役決定手段で決定された当選役が特別当選役で、且つその特別当選役を入賞させたときに、通常モードよりも利益付与確率が高くなる特別遊技モードが所定回数の役物遊技が連続して行われる連続役物モードから構成されたときに、前記連続役物モードでの遊技回数を決

定する役物遊技回数決定手段としてコンピュータを機能 させるためのプログラム。

【請求項10】 遊技開始手段の操作によりハズレ及び 複数種類の当選役のうちのいずれかを決定する当選役決 定手段と、リールごとに設けられたリール停止操作手段 の操作に応答し、前記当選役決定手段で決められた当選 役を構成する絵柄が同一の入賞ライン上に停止するよう に対応するリールの停止制御を行うリール停止制御手段 と、前記当選役決定手段で決定された当選役が特別当選 役で、且つその特別当選役を入賞させたときに、通常モードよりも利益付与確率が高くなる特別遊技モードでの 遊技を行う手段との他に、前記特別遊技モードが所定回 数の役物遊技が連続して行われる連続役物モードから構 成されたときに、前記連続役物モードを構成する所定回 数の役物遊技での入賞可能回数を決定する入賞回数決定 手段としてコンピュータを機能させるためのプログラム

【請求項11】 遊技開始手段の操作によりハズレ及び 複数種類の当選役のうちのいずれかを決定する当選役決 定手段と、リールごとに設けられたリール停止操作手段 の操作に応答し、前記当選役決定手段で決められた当選 役を構成する絵柄が表示窓で停止するように対応するリ ールの停止制御を行うリール停止制御手段と、前記当選 役決定手段で決定された当選役が特別当選役で、且つそ の特別当選役を入賞させたときに、通常モードよりも利 益付与確率が高くなる特別遊技モードでの遊技を行う手 段との他に、前記特別遊技モードが複数回の役物遊技が 連続して行われる連続役物モードが少なくとも1回以上 含まれるとともに、前記連続役物モードに移行させるた めの連続役物移行遊技が所定回数行われる連続役物増加 モードから構成されるときに、前記連続役物移行遊技の 遊技回数を決定する遊技回数決定手段としてコンピュー タを機能させるためのプログラム。

【請求項12】 遊技開始手段の操作によりハズレ及び 複数種類の当選役のうちのいずれかを決定する当選役決 定手段と、リールごとに設けられたリール停止操作手段 の操作に応答し、前記当選役決定手段で決められた当選 役を構成する絵柄が表示窓で停止するように対応するリ ールの停止制御を行うリール停止制御手段と、前記当選 役決定手段で決定された当選役が特別当選役で、且つそ の特別当選役を入賞させたときに、通常モードよりも利 益付与確率が高くなる特別遊技モードでの遊技を行う手 段との他に、前記特別遊技モードが複数回の役物遊技が 連続して行われる連続役物モードが少なくとも1回以上 含まれるとともに、前記連続役物モードに移行させるた めの連続役物移行遊技が所定回数行われる連続役物増加 モードから構成されたときに、前記連続役物モードを構 成する複数回の役物遊技での入賞可能回数を決定する入 賞回数決定手段としてコンピュータを機能させるための プログラム。

【請求項13】 請求項9~12いずれか記載のプログラムが記憶されるとともに、そのプログラムをコンピュータで読み取ることのできる記憶媒体。

【発明の詳細な説明】

[0001]

【発明の属する技術分野】本発明は、パチンコ店などの 遊技場に設置して使用される遊技機及びプログラム及び 記憶媒体に関するものである。

[0002]

【従来の技術】パチンコ店などの遊技場に設置して使用 されるスロットマシンはパチスロ機と称され、その遊技 媒体となっているメダルに一定の価値が与えられて、ゲ ーム(遊技)を行って獲得したメダルを種々の景品に交 換することができる。このため、遊技者はメダルを大量 に獲得するということだけを目的とし、確率的に当選を 得やすくなるボーナスゲームを行う権利が得やすい台を 選択してゲームを行おうとするのが一般である。スロッ トマシンでは、リールがステッピングモータで駆動され る構造となっており、乱数のサンプリングに基づく電子 抽選により当選の有無やその種類を決定し、この決定に 対応してリールの停止制御を行っている。したがって、 電子抽選による当選の発生確率をソフト的に調整して当 選が得やすくなる状態をつくりだすことができ、これを 利用してボーナスゲームができるようにしてある。な お、本明細書中ではパチスロ機を例に挙げて説明してい るため、遊技媒体としてメダルを用いるが、遊技媒体と してはコインやパチンコ玉など他の媒体も含む。また、 「メダル(遊技媒体)の投入」にはクレジットされたメ ダルをベットボタンなどによりベットすることも含む。 【0003】ボーナスゲームとしては、例えばビッグボ ーナス(以下、BB)モードに移行して行われるゲーム や、レギュラーボーナス(以下、RB)モードに移行し て行われるゲームなどがあり、これらのゲームは特別当 選役であるBB及びRBを入賞させることで行うことが できる。

【0004】例えばRBモードへの移行は、リールの絵柄が「BAR-BAR-BAR」に揃えられたときに1枚のメダルベットでゲームが行われ、最大8回入賞するか、又は最大12回のゲームを行うことで終了する。また、BBモードへの移行はリールの絵柄が例えば「7-7」に揃えられたときに行われ、このBBモードのゲームでは上述したRBモードでのゲームが2~3回繰り返される。また、BBモードでは、RBモードに移行する前に高い当選確率のもとで1~3枚のメダルをベットしてゲームを行う権利が与えられるRB導入ゲームもあり、このRB導入ゲーム期間中に当選(ボーナスイン)絵柄が揃うとRBモードに移行する。このRBモード又はBBモード下でのゲームを行った場合には、通常モードでのゲームと比較して大量のメダルを獲得することができる。なお、本明細書中では、当選役に対応した

リール絵柄を揃えることを入賞、入賞される前の状態で 電子抽選により当選役が抽選されたことを内部入賞とす る。

[0005]

[0007]

【発明が解決しようとする課題】しかしながら、RBモードやBBモードの終了条件は同じであり、例えば遊技者が熟練者である場合に、例えばBBモードでは、RB導入ゲームを終了条件ぎりぎりまで行ってRBモードを行うので大量のメダルが得られる反面、非熟練者が行った場合には、RB導入ゲームを多く残したままRBモードに移行させてしまうため、熟練者よりも少ない獲得メダル枚数となる。また、RBモード及びBBモードの終了条件は固定であるため、RBモード及びBBモードでのゲームが単調なものとなってしまうという欠点がある。

【0006】本発明は、RBモード及びBBモードのゲームの単調化を防止できるようにした遊技機及びプログラム及び記憶媒体を提供することを目的とする。

【課題を解決するための手段】上記目的を達成するため に、本発明の遊技機は、遊技開始手段の操作によりハズ レ及び複数種類の当選役のうちのいずれかを決定する当 選役決定手段と、リールごとに設けられたリール停止操 作手段の操作に応答し、前記当選役決定手段で決められ た当選役を構成する絵柄が同一の入賞ライン上で停止す るように対応するリールの停止制御を行うリール停止制 御手段とを備え、前記当選役決定手段で決定された当選 役が特別当選役で、且つその特別当選役を入賞させたと きに、通常モードよりも利益付与確率が高くなる特別遊 技モードでの遊技を行えるようにしたものであり、前記 特別遊技モードを、複数回の役物遊技が連続して行われ る連続役物モードから構成するとともに、前記役物遊技 の遊技回数を決定する遊技回数決定手段を設けたもので ある。なお、利益付与確率とは例えば出玉率が挙げられ る。

【0008】また、遊技開始手段の操作によりハズレ及び複数種類の当選役のうちのいずれかを決定する当選役決定手段と、リールごとに設けられたリール停止操作手段の操作に応答し、前記当選役決定手段で決められた当選役を構成する絵柄が同一の入賞ライン上で停止するように対応するリールの停止制御を行うリール停止制御手段とを備え、前記当選役決定手段で決定された当選役が特別当選役で、且つその特別当選役を入賞させたときに、通常モードよりも利益付与確率が高くなる特別遊技モードでの遊技を行えるようにしたものであり、前記特別遊技モードを、複数回の役物遊技が連続して行われる連続役物モードから構成するとともに、前記連続役物モードを構成する複数回の役物遊技での入賞可能回数を決定する入賞回数決定手段を設けたものである。

【0009】また、遊技開始手段の操作によりハズレ及

び複数種類の当選役のうちのいずれかを決定する当選役 決定手段と、リールごとに設けられたリール停止操作手 段の操作に応答し、前記当選役決定手段で決められた当 選役を構成する絵柄が同一の入賞ライン上で停止するよ うに対応するリールの停止制御を行うリール停止制御手 段とを備え、前記当選役決定手段で決定された当選役が 特別当選役で、且つその特別当選役を入賞させたとき に、通常モードよりも利益付与確率が高くなる特別遊技 モードでの遊技を行えるようにしたものであり、前記特 別遊技モードを、複数回の役物遊技が連続して行われる 連続役物モードが少なくとも1回以上含まれるととも に、前記連続役物モードに移行させるための連続役物移 行遊技が所定回数行われる連続役物増加モードから構成 するとともに、前記連続役物移行遊技の遊技回数を決定 する遊技回数決定手段を設けたものである。

【0010】また、遊技開始手段の操作によりハズレ及 び複数種類の当選役のうちのいずれかを決定する当選役 決定手段と、リールごとに設けられたリール停止操作手 段の操作に応答し、前記当選役決定手段で決められた当 選役を構成する絵柄が同一の入賞ライン上で停止するよ うに対応するリールの停止制御を行うリール停止制御手 段とを備え、前記当選役決定手段で決定された当選役が 特別当選役で、且つその特別当選役を入賞させたとき に、通常モードよりも利益付与確率が高くなる特別遊技 モードでの遊技を行えるようにしたものであり、前記特 別遊技モードを、複数回の役物遊技が連続して行われる 連続役物モードが少なくとも1回以上含まれるととも に、前記連続役物モードに移行させるための連続役物移 行遊技が所定回数行われる連続役物増加モードから構成 するとともに、前記当選役決定手段で決定された当選役 が前記特別当選役のときに、前記連続役物モード中の役 物遊技での入賞可能回数を決定する入賞回数決定手段を 設けたものである。

【0011】なお、前記遊技回数及び入賞回数は、前記特別遊技モードへ移行するまでの所定回数の遊技期間中に払い出された遊技媒体の個数と、遊技のために投入された遊技媒体の個数との個数差から決定されることが好ましい。また、前記遊技回数及び入賞回数は、前記特別遊技モードへ移行するまでの所定回数の遊技期間中に払い出された遊技媒体の個数に応じて決定されることが好ましい。

【0012】また、前記遊技回数及び入賞可能回数は、遊技の終了から遊技の開始までの期間内での遊技者の選択により行われることが好ましい。また、前記特別遊技モードでの払い出し期待値を、前記入賞可能回数又は前記遊技回数の少なくともいずれか一方と相補的となるように形成し、前記特別遊技モードでの払い出しを前記期待値に近づけるような制御を行うことが好ましい。

【0013】また、プログラムとしては、遊技開始手段の操作によりハズレ及び複数種類の当選役のうちのいず

れかを決定する当選役決定手段と、リールごとに設けられたリール停止操作手段の操作に応答し、前記当選役決定手段で決められた当選役を構成する絵柄が同一の入賞ライン上で停止するように対応するリールの停止制御を行うリール停止制御手段と、前記当選役決定手段で決定された当選役が特別当選役で、且つその特別当選役を入賞させたときに、通常モードよりも利益付与確率が高くなる特別遊技モードでの遊技を行う手段との他に、前記特別遊技モードが所定回数の役物遊技が連続して行われる連続役物モードから構成されたときに、前記連続役物モードでの遊技回数を決定する役物遊技回数決定手段としてコンピュータを機能させるためのものである。

【0014】また、プログラムとしては遊技開始手段の操作によりハズレ及び複数種類の当選役のうちのいずれかを決定する当選役決定手段と、リールごとに設けられたリール停止操作手段の操作に応答し、前記当選役決定手段で決められた当選役を構成する絵柄が同一の入賞ライン上に停止するように対応するリールの停止制御を行うリール停止制御手段と、前記当選役決定手段で決定された当選役が特別当選役で、且つその特別当選役を入賞させたときに、通常モードよりも利益付与確率が高くなる特別遊技モードでの遊技を行う手段との他に、前記特別遊技モードが所定回数の役物遊技が連続して行われる連続役物モードから構成されたときに、前記連続役物モードを構成する所定回数の役物遊技での入賞可能回数を決定する入賞回数決定手段としてコンピュータを機能させるためのものである。

【0015】また、プログラムとしては、遊技開始手段 の操作によりハズレ及び複数種類の当選役のうちのいず れかを決定する当選役決定手段と、リールごとに設けら れたリール停止操作手段の操作に応答し、前記当選役決 定手段で決められた当選役を構成する絵柄が表示窓で停 止するように対応するリールの停止制御を行うリール停 止制御手段と、前記当選役決定手段で決定された当選役 が特別当選役で、且つその特別当選役を入賞させたとき に、通常モードよりも利益付与確率が高くなる特別遊技 モードでの遊技を行う手段との他に、前記特別遊技モー ドが複数回の役物遊技が連続して行われる連続役物モー ドが少なくとも1回以上含まれるとともに、前記連続役 物モードに移行させるための連続役物移行遊技が所定回 数行われる連続役物増加モードから構成されるときに、 前記連続役物移行遊技の遊技回数を決定する遊技回数決 定手段としてコンピュータを機能させるためのものであ

【0016】また、プログラムとしては、遊技開始手段の操作によりハズレ及び複数種類の当選役のうちのいずれかを決定する当選役決定手段と、リールごとに設けられたリール停止操作手段の操作に応答し、前記当選役決定手段で決められた当選役を構成する絵柄が表示窓で停止するように対応するリールの停止制御を行うリール停

止制御手段と、前記当選役決定手段で決定された当選役が特別当選役で、且つその特別当選役を入賞させたときに、通常モードよりも利益付与確率が高くなる特別遊技モードでの遊技を行う手段との他に、前記特別遊技モードが複数回の役物遊技が連続して行われる連続役物モードが少なくとも1回以上含まれるとともに、前記連続役物モードに移行させるための連続役物移行遊技が所定回数行われる連続役物増加モードから構成されたときに、前記連続役物モードを構成する複数回の役物遊技での入賞可能回数を決定する入賞回数決定手段としてコンピュータを機能させるためのものである。

【0017】また、記憶媒体としては、上記記載のプログラムが記憶されるとともに、そのプログラムをコンピュータで読み取ることのできる記憶媒体。

[0018]

【発明の実施の形態】図1に示すように、スロットマシン2は通常モードの他に、特別当選役であるBB移行役を入賞させたときに移行する特別遊技モードとして設定されたBBモードを備えている。BBモードは少なくとも1回以上のRBモードと、このRBモードへと導入させるための所定回数のRB導入ゲームとから構成されており、BB移行役を入賞させたときには、多くのメダルを得る確率が高くなる。なお、RBモードは1枚賭けの役物ゲームが複数回連続して行われるモードである。これにより、1枚賭けの役物ゲームは役物遊技、RBモードは連続役物モード、BBモードは連続役物増加モードとしてそれぞれ機能する。

【0019】このスロットマシン2は、筐体3の前面扉4に4個の絵柄表示窓5~8が設けられ、各々の表示窓の奥に第1リール9a、第2リール9b、第3リール9c及びサブリール10が回転自在に組み込まれている。周知のように、第1~第3リール9a~9cの外周には様々な絵柄が一定ピッチで配列され、リールが停止した状態では対応する表示窓を通して1リール当たり3個の絵柄が観察される。これにより、各リールの絵柄を1個ずつ組み合わせた直線状の入賞ラインが横3本斜め2本の合計5本設定されている。なお、本実施形態では表示窓を各リールに対応するように形成したが、これに限定する必要はなく、全てのリールを1つの表示窓により表示するようにしてもよい。

【0020】ゲームの開始に先立ってメダル投入口11から1枚のメダルを投入したときには中央横一本の入賞ラインが有効化され、2枚では横3本、3枚ではさらに斜め2本を加えた5本の入賞ラインが有効化される。以下、有効化された入賞ラインを入賞有効ラインとする。また、メダルは50枚を限度に貯留することが可能になっており、貯留されているメダルの枚数は、クレジット枚数表示器12により表示される。

【0021】サブリール10は、ゲーム開始用のスタートレバー13を操作したときに、他のリール9a~9c

とともに回転を始め、スタートレバー13の操作時の電子抽選で、例えばBBモードに移行させるBB移行役が抽選されたときにBB当選し、「7」を表示し、BB当選していることを遊技者に告知する。

【0022】リール停止操作手段であるストップボタン14a~14cの上方の操作パネルには、メダルがクレジットされた状態でゲームを行うときに操作される1枚ベットボタン、MAXベットボタン、ペイアウトボタンなどの各種の操作ボタンが設けられている。これらの操作ボタンの機能はいずれも周知であるのでその詳細については省略する。モード切替ボタン15は、1枚ベットボタン、MAXベットボタン、ペイアウトボタン等の側方に設けられており、BBモードでの遊技の遊技回数を選択するために設けられている。モード表示部16は前面扉のモード切替ボタンの近傍に設けられている。このモード表示部16の背面側にはLED等の発光素子からなるモード表示器38(図2参照)が配置されており、モード切替ボタン15の押圧を受けて、LED表示が切り替わるようになっている。

【0023】図2に示すように、スロットマシン2の作動は基本的にCPU20及びメモリ21を含むマイクロコンピュータによって管制される。メダルセンサ22はメダル投入口11から投入された適正なメダルを検知し、CPU20の制御部20aに入力する。メダル投入口11の奥にはセレクタが組み込まれ、不適正なメダルはメダル払出口17を介してメダル受け皿18(図1参照)に排出される。また、セレクタは不適切なタイミングでメダルの投入が行われたとき、例えばゲームの途中や各種の操作ボタンが押されたままの状態で投入されたメダルについても、メダルセンサ22を経由させずにメダル受け皿18に排出する。

【0024】なお、ゲームの開始に先立って投入するメ ダルの枚数は1~3枚に限られているため、クレジット 機能を用いていないときには4枚目以降に投入されたメ ダルもメダルセンサ22で検知されることなくメダル受 け皿18に排出される。クレジット機能のオン/オフは ペイアウトボタンの1プッシュごとに切替えられる。そ して、クレジット機能がオン状態のときには4枚目以降 に投入されたメダルもメダルセンサ22で検知され、5 0枚を限度にスロットマシン2の内部に貯留される。貯 留されたメダルの枚数は、クレジット枚数表示器12で デジタル表示される。クレジット機能を用いているとき には、前述した1枚ベットボタンやMAXベットボタン の操作によりメダルの投入操作が行われ、そのベット枚 数がクレジット枚数から逐次に減算される。また、ゲー ムの結果、当たりが得られたときには配当メダルもクレ ジットされ、ペイアウトボタンを操作したときにクレジ ットされたメダルがメダル受け皿18に払い出される。 【0025】制御部20aは、ゲームの開始に先立って 投入された1~3枚のメダルの枚数をメダルセンサ22

からの検知信号に基づいて計数し、これにより入賞有効 ラインの本数が決定される。また、ゲームの開始ごとに 投入されたメダルのベット枚数は制御部20aの内部に 設けられたカウンタで積算して計数される。なお、クレジット枚数は図示を省略した別のクレジットメダルカウンタで計数される。

【0026】モード切替スイッチセンサ23は、モード切替ボタン15が押圧されたときにオンとなり、モード切替信号を制御部20aに向けて出力する。制御部20aでは、このモード切替信号が入力されるたびに、後述する遊技回数決定部35に選択開始信号を出力する。また、制御部20aでは、モード切替信号が入力されるたびに、後述するモード表示器38に表示切替信号を出力する。なお、ゲーム中やBBモードでのゲームを行っている際に、モード切替信号が制御部20aに入力された場合には、そのモード切替信号を無効とする。

【0027】スタートスイッチセンサ24は、スタートレバー13が操作されたときにオンとなり、ゲームスタート信号を制御部20aに向けて出力する。ゲームスタート信号を受けて、制御部20aはメモリ21のROM領域に格納されたゲーム実行プログラムに基づいて第1~第3リール9a~9c及びサブリール10を回転させるともにゲームの処理を開始する。各リールの駆動及び停止制御は、リール駆動コントローラ27によって行われる。それぞれのリールは個別のステッピングモータ28a~28dの駆動を制御することにより各リールの制御が行われる。なお、メモリ21のRAM領域はワーキングエリアとなっており、毎回のゲームごとに利用されるフラグやデータなどの一時的保管や書き換えなどに用いられる。

【0028】ステッピングモータ28a~28dは供給された駆動パルスの個数に応じた回転角で回転し、制御部20aにより駆動パルスの供給個数を制御することによって第1~第3リール9a~9c及びサブリール10の回転角を制御することができ、また駆動パルスの供給を絶つことによりリールの停止位置を決めることができる。また、各リールには、その基準位置に反射信号部29a~29dが一体に形成され、その一回転ごとにフォトセンサ30a~30dに形成され、その一回転ごとにフォトセンサ30a~30dによる検知信号は、リールごとのリセット信号として制御部20aに出力される。

【0029】制御部20aの内部には、ステッピングモータごとにパルスカウンタが設けられ、各々のステッピングモータに供給された駆動パルスの個数を計数する。このパルスカウンタのカウント値は、リセット信号が入力されるたびにクリアされ、再びアップカウントされる。したがって、それぞれのパルスカウンタには、各リールの1回転内の回転角に対応した駆動パルスの個数が

逐次に更新しながら保存されることになる。

【0030】メモリ21のROM領域には絵柄テーブルが格納され、絵柄テーブルには、各リールの基準位置からの回転角に対応した駆動パルスの個数と、リールに一定ピッチで配列されたそれぞれの絵柄を表す絵柄コードとが対応づけられている。したがって、リールごとにパルスカウンタのカウント値を監視することによって、例えば中央の入賞有効ライン上にどの絵柄が移動してきているのかを識別することができ、また、どの程度リールを回転させれば目的の絵柄がその入賞有効ライン上に移動してくるのかを予測することができる。

【0031】ストップボタン14a~14cの内部にはセンサが設けられており、ストップボタン14a~14cが押圧されたときに制御部20aに向けてリールごとのストップ信号を入力する。スタートレバー13を操作して全リールの回転が始まり、これらの回転が定常速度に達した時点でストップボタン14a~14cの操作が有効化される。その後、これらを押圧操作することによってそれぞれ対応する第1~第3リール9a~9cの停止制御が開始される。以上のように、ストップボタン14a~14cはリール停止操作手段、制御部20aはリール停止制御手段としてそれぞれ機能する。なお、複数のストップボタン14a~14cを操作したときにはタイミングの早い方のリールだけが停止し、完全に同時操作したときにはいずれのリールも停止しないようになっている。

【0032】制御部20aは、ゲームスタート信号を受けて電子抽選部31を作動させる。電子抽選部31は乱数発生部と乱数値サンプリング回路とを含み、ゲームが開始されるごとに一つの乱数値を抽選し、当選役決定部32ではその値に応じて現在実行されているゲームでの当選役を決定する。このように、制御部20a、電子抽選部31及び当選役決定部32は当選役決定手段として機能する。

【0033】当選役決定部32には、通常モード下での各ゲームにおける当選役の決定に用いられる第1当選テーブルと、BB移行役が内部入賞した場合に用いられる第2当選テーブルと、BBモード中のRB導入ゲームで使用される第3当選テーブルと、RBモードで使用される第4当選テーブルとが設けられている。電子抽選部31で抽選された当選の種類を表す当選信号は当選役決定部32に送られ、この当選信号に対応する当選役信号が当選役決定部32から制御部20aに出力される。なお、制御部20aでは、当選役信号に対応する当選フラグがメモリ21のRAM領域に書き込まれる。

【0034】遊技回数決定部35は、モード切替スイッチセンサ23からの出力信号を受けて、BBモードをBBモードを構成するRBモードの入賞可能回数A及びRB導入ゲームのゲーム回数Bを決定する。この遊技回数決定部35には遊技回数テーブル37が設けられてい

る。この遊技回数テーブル37は、RBモードでの入賞 可能回数A及びRB導入ゲームのゲーム回数Bの組み合 わせからなるテーブルデータから構成されている。な お、RBモードでの入賞可能回数A及びRB導入ゲーム のゲーム回数Bの組み合わせは、BBモードを行った際 の純増メダル枚数(獲得メダル枚数-投入メダル枚数) の総数がほぼ所定枚数(例えば430枚)となるように 設定されている。本実施例では、入賞可能回数Aが6. 8,10の3種類、RB導入ゲームのゲーム回数Bを 5、15、25の3種類とし、入賞可能回数Aが10、 ゲーム回数 Bが5の場合を第1 B Bモード、入賞可能回 数Aが8、ゲーム回数Bが15の場合を第2BBモー ド、入賞可能回数Aが6、ゲーム回数Bが25の場合を 第3BBモードとして説明する。なお、このRBモード での入賞可能回数A及びRB導入ゲームのゲーム回数B は、上記記載に限定されるものではなく、適宜設定して よいものとする。

【0035】モード表示器38は、モード表示部16の背面に設けられており、例えば、モード表示するために例えば3個のLED発光素子及びドライバから構成されている。モード表示器38では、制御部20aからの表示切替信号を受けてモード表示を切り替える。なお、第1BBモードの場合には左側のLED発光素子が、第2BBモードの場合には中央のLED発光素子が、第3BBモードの場合には右側のLED発光素子が点灯するようになっている。

【0036】ゲーム数カウンタ39は、BBモード中の RB導入ゲームのゲーム回数及びRBモード中の役物ゲームのゲーム回数をそれぞれカウントするために設けられている。制御部20aでは、このゲーム数カウンタ3 9のカウント値を参照して、進行するゲーム回数が決定されたゲーム回数に到達した時点で、BBモード又はRBモードを終了させる。

【0037】メダルホッパー40は、当選役が入賞した際に、その当選役に対応する配当メダル数をメダル受け皿18に払い出し、あるいはクレジットカウンタにその規定枚数を加算する。なお、当選役の種類ごとに配当メダルの枚数を決めた配当テーブルはメモリ21のROM領域に格納されており、制御部20aがこれを読み取ってメダルホッパー40を駆動する。

【0038】初期設定入力部41は筐体3の内部に設けられ、前面扉4を開いた状態で操作可能となる。この初期設定入力部41には、主電源となる電源スイッチ、設定変更ボタン、BBモードが終了した時点で打ち止めにするか否かを選択できる選択スイッチ等が設けられる。なお、ペイアウト率の変更は設定変更ボタンの押圧により行われ、6段階の間でペイアウト率を可変できるようになっている。ペイアウト率の変更時には、各当選テーブルのグループ割り当ての調整も行われる。

【0039】次に、このようにして構成されたスロット

マシンの作用について、図3のフローチャートに基づき 説明する。ゲームの開始に先立って1~3枚のメダルを 投入操作した後、モード切替ボタン15を押圧すること により、BBモードを、第1~第3BBモードのいずれ かで行うかを選択する。例えば、ゲーム開始前の設定が 第2BBモードに設定されていて、遊技者が行いたいB Bモードが第3BBモードの時には、モード切替ボタン を1回押圧する。なお、第1BBモードで行う場合に は、モード切替ボタンを2回押圧する。

【0040】モード切替ボタン15の押圧により、モード切替スイッチセンサ23からモード切替信号が出力されると、制御部20aでは、遊技回数決定部36に向けて遊技回数選択信号を出力するとともに、モード表示器38に表示切り替え信号を出力する。これを受けて、モード表示器38では、第2BBモードの表示となる中央のLED発光素子を消灯して、第3BBモードの表示となる右側のLED発光素子を点灯させる。一方、遊技回数誤部36は、遊技回数テーブル37から第2BBモードに対応するRBモードでの入賞可能回数A(A=6)及びRB導入ゲームの遊技回数B(B=25)を選択する。そして、メモリ21のRAM領域にこれら数値を書き込む。なお、スタートレバー13を押下した後にモード切替ボタンが押圧された場合は、モード切替信号は無効となる。

【0041】その後、スタートレバー13の操作により 通常モードでのゲームが開始され、第1~第3リール9 a~9 c、及びサブリール10が一斉に回転を始める。 これと同時に、電子抽選部31では乱数をサンプリング し、当選役決定部32に出力する。この乱数値を用いて、当選役決定部32では第1当選テーブルを参照して 当選役を決定し、その当選信号を制御部20aに出力する。

【0042】当選役決定部32で決定された当選役がBB移行役である場合、制御部20aは、メモリ21のRAM領域にBB当選フラグを書き込む。そして、遊技者がBB移行役となる「7-7-7」を同一の入賞有効ライン上に揃えると、BBモードでのゲームへと移行する。このとき、BB移行役を入賞させた後にモード変更ボタン15を押圧しても、制御部20aではそのモード切替信号を無効とする。なお、当選役決定部32でBB移行役以外の当選役又はハズレとなる場合には、通常ゲーム処理が行われる。

【0043】BBモードに移行すると、制御部20aは、メモリ21のRAM領域に記憶されたRBモード中の役物ゲームでの入賞可能回数A(A=6)とRB導入ゲームの遊技回数B(B=25)を参照する。そして、スタートボタン13が押下されるとRB移行ゲームが開始される。このBBモードでは、当選役決定部32で使用される当選テーブルは第2当選テーブルに切り替わっており、小役が当選しやすくなっているため、BBモー

ドを行うことにより大量のメダルを得ることが可能となる。なお、このBBモードに含まれるRBモードは1枚がけのジャックゲームであり、このジャックゲームで入賞可能回数Aの(A=6)入賞か役物ゲームを12回行うことで1回のRBモードが終了する。そして、RB導入ゲームを遊技回数B(B=25回)を消化するか、RBモードを3回消化した場合に、BBモードが終了し、通常モードでのゲームへと移行する。

【0044】なお、第1BBモードの場合には、RB導入ゲームの遊技回数Aが5回、RBモードでの入賞可能回数Bが10回なので、RBモードのみで純増メダル枚数を増やすこととなり、初心者向きのBBモードとなる。一方、第3BBモードでは、RB導入ゲームの遊技回数Aが25回、RBモードでの入賞可能回数Bが6回なので、RB導入ゲームでも稼げる熟練者向きのBBモードとなる。これにより、遊技者の熟練度に合わせてBBモードの純増メダル枚数の最大値は、所定値(例えば430枚)に設定されているので、遊技者によって得られる純増メダル枚数に大した差が出ることはない。

【0045】また、図2の機能ブロック図、図3のフローチャートで示す手順及び機能をスロットマシンの制御装置で実行するためのプログラムを、例えばフレキシブルディスク、光ディスク等の記憶媒体に記憶させてもよい。例えば、図4に示すように、記憶媒体50には、当選役決定手段、リール制御手段を実現するためのプログラムの他に、ゲームの開始からの経過時間を計測する手段、計測された時間によりリールの停止制御を変更するか否かを判定する手段が記録されている。この記憶媒体50をスロットマシン51に内蔵された読取装置52に装填して、そのプログラムをスロットマシンにインストールしたり、読取装置52に記憶媒体50を装填した状態でゲームを実行させる。なお、符号53はCPU、符号54はメモリである。

【0046】また、前記プログラムを、記憶媒体を利用してインストールする代わりに、インターネットを利用して、スロットマシンに配信させることができる。また、上記プログラムに、リールを回す機能、各リールを停止させる機能等のスロットマシンの基本動作を実行させるプログラムを追加することで、パソコンにインストールし、モニタ上でスロットマシンゲームを行うことができる。

【0047】本実施形態では、得られる純増メダル枚数の上限値が所定の値となるように、RBモードの入賞回数及びRB移行ゲームの遊技回数が異なる複数個のBBモードを設けたが、これに加えてRBゲーム中入賞の回数に上限を設けてもよい。この場合、RBモードでの入賞回数が上限値に到達した場合には、入賞可能回数に到達していなくてもリールの停止制御を蹴飛ばし制御に変更する、これにより、残り役物ゲームで入賞させること

ができなくなり、BBモードでの出玉率(期待値)を所定の値に近づけることができる。

【0048】本実施形態では、ゲームの終了から次ゲームのゲーム開始までの間でBBモードの選択を行えるようにしているが、例えばBBモードに移行した場合にBBモードの選択を行えるようにしたり、適宜設定してよい。

【0049】本実施形態では、行われるBBモードを遊技者に選択させるようにしたが、BB移行役が当選した場合に、使用するBBモードを抽選で決定させるようにしてもよい。この場合、遊技者に向けての報知を行わないようにすることで、遊技者にはBBモード中のRBモードに対して期待感を与えることができる。また、通常モードでの所定ゲーム区間での獲得メダル枚数、又は獲得メダル枚数と投入メダル枚数との差(純増メダル枚数)のいずれか一方に基づいて、移行するBBモードを構成するRB導入ゲームのゲーム回数及びRBモードでの入賞可能回数を選択するようにしてもよい。このようにすることで、出玉率の偏りの小さいスロットマシンとなる。

【0050】また、この他に、ペイアウト率の変更時に BBモード中のRB導入ゲームの遊技回数又はRBモー ド中の入賞可能回数のいずれか一方を変更させるように してもよい。スロットマシンでは、通常ペイアウト率は 6段階の調整を行えるようになっており、6段階のペイ アウト率に合わせて、BBモード中のRB導入ゲームの 遊技回数又はRBモード中の入賞可能回数のいずれか一 方を変更する。これにより、ペイアウト率の低い設定に なっている場合には、入賞可能回数が少なく、又は遊技 回数の少ないBBモードが行われ、ペイアウト率が高い 場合には、入賞可能回数が多い、又は遊技回数の多いB Bモードが行われるようになる。また、BBモード中の 払い出し期待値をペイアウト率に関係なく一定にする場 合には、ペイアウト率の低い設定の場合には、入賞可能 回数が多い、又は遊技回数の多いBBモードが、ペイア ウト率が高い設定の場合には、入賞可能回数が少なく、 又は遊技回数の少ないBBモードが行われるようにな る。なお、ペイアウト率の低い設定で払い出し期待値に 到達した場合には、それ以降のゲームでは、各リールの 停止制御を蹴飛ばし制御で行う割合を多くすることで、

予め設定された払い出し期待値に近づけることができ る。

【0051】本発明は、BBモードのRB移行ゲームの遊技回数及びBBモード下のRBモードでの入賞可能回数について選択させるようにしたが、RBモードについても同様に行うことが可能である。

[0052]

【発明の効果】以上のように、本発明の遊技機によれば、特別遊技モードを、所定の遊技回数の役物遊技が連続して行われる連続役物モードや、連続役物モードが少なくとも1回以上含まれるとともに、前記連続役物モードに移行させるための連続役物移行遊技が複数回行われる連続役物増加モードから構成し、前記当選役決定手段で決定された当選役が前記特別当選役のときに、前記役物遊技の遊技回数や入賞可能回数を選択するようにしたから、連続役物モードや連続役物増加モードを多様化させることができるとともに、遊技者に期待感を与えることができる。

【0053】また、特別遊技モードでの払い出し期待値を、入賞可能回数と相補的となるように形成し、前記特別遊技モードでの払い出しを一定にするようにしたから、大量のメダルが払い出されることがなくなるので、遊技場にとって安心できる遊技機となる。

【図面の簡単な説明】

【図1】本発明を実施したスロットマシンの外観を示す 斜視図である。

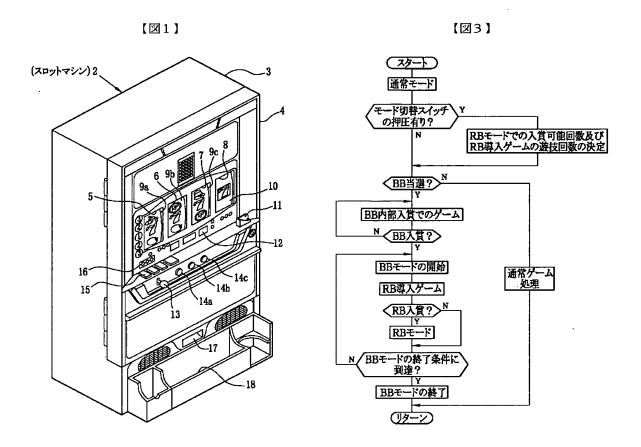
【図2】図1に示したスロットマシンの電気的構成を示す機能ブロック図である。

【図3】ゲームの流れを示すフローチャートである。

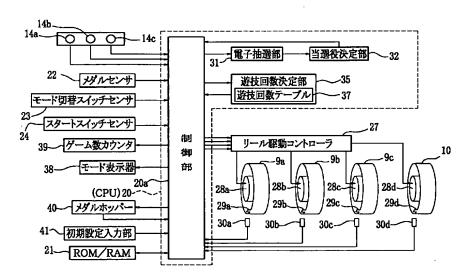
【図4】プログラムが格納された記憶媒体を、スロット マシンにインストールする場合の説明図である。

【符号の説明】

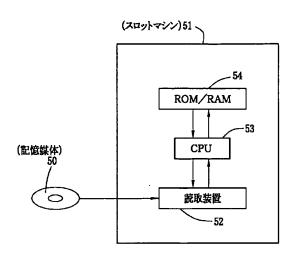
- 2 スロットマシン
- 15 モード切替ボタン
- 16 モード表示器
- 23 モード切替スイッチセンサ
- 35 遊技回数決定部
- 37 遊技回数テーブル
- 38 モード表示器
- 39 ゲーム数カウンタ



【図2】







フロントページの続き

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Bibliography

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Summary

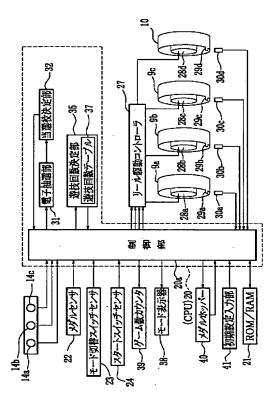
(57) [Abstract]

[Technical problem] The composition in game mode is diversified specially. [Means for Solution] If a mode selection button is pressed in case a game person starts a game, control-section 20a will output the number-of-times determination signal of a game to the number-of-times determination section 35 of a game. In the number-of-times determination section 35 of a game, the number of times A in RB mode which constitutes BB mode for which a prize can be won, and the number of times B of a game of RB shift game are determined with reference to the number-of-times table 37 of a game. In addition, it consists of table data which consist of combination of the number of times A in RB mode for which a prize can be won, and the number of times B of a game of RB shift game in BB mode, and even if it chooses any of these combination, it is set to the number-of-times table 37 of a game so that the upper limit of the net increase medal number of sheets obtained in BB mode may become fixed. From this, while being able to diversify the composition

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in game mode specially, it cannot be concerned with a game person's skill, but the medal of predetermined number of sheets can be obtained.

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CLAIMS

[Claim(s)]

[Claim 1] The game machine characterized by providing the following A role determination means of success in an election by which operation of a game start means determines either HAZURE or two or more kinds of roles of success in an election Answer operation of the reel halt operation means established for every Lille, and it has the reel halt control means which perform halt control of the reel which corresponds so that the pattern which constitutes the role of success in an election decided with the aforementioned role determination means of success in an election may stop on the same winning-a-prize line. When the role of success in an election determined with the aforementioned role determination means of success in an election is a role of success in an election specially and the role of special success in an election is made to win a prize A number-of-times determination means of a game to determine the number of times of a game of the aforementioned accessory game while constituting the aforementioned special game mode from continuation accessory mode in which the accessory game of multiple times is performed continuously, in the game machine which enabled it to perform the game in the special game mode in which profits grant probability becomes high rather than the normal mode

[Claim 2] The game machine characterized by providing the following A role determination means of success in an election by which operation of a game start means determines either HAZURE or two or more kinds of roles of success in an election Answer operation of the reel halt operation means established for every Lille, and it has the reel halt control means which perform halt control of the reel which corresponds so that the pattern which constitutes the role of success in an election decided with the aforementioned role determination means of success in an election may stop on the same winning-a-prize line. When the role of success in an election determined with the aforementioned role determination means of success in an election is a role of success in an election specially and the role of special success in an election is made to win a prize In the game machine which enabled it to perform the game in the special game mode in which profits grant probability becomes high rather than the normal mode, while constituting the aforementioned special game mode from continuation accessory mode in which the accessory game of multiple times is performed continuously A number-of-times determination means of winning a prize to determine the number of times in the accessory game of the multiple times which constitute the aforementioned continuation accessory mode for which a prize can be won

[Claim 3] The game machine characterized by providing the following A role determination means of success in an election by which operation of a game start means determines either HAZURE or two or more kinds of roles of success in an election Answer operation of the reel halt operation means established for every Lille, and it has the reel halt control means which perform halt control of the reel which corresponds so that the pattern which constitutes the role of success in an

election decided with the aforementioned role determination means of success in an election may stop on the same winning-a-prize line. When the role of success in an election determined with the aforementioned role determination means of success in an election is a role of success in an election specially and the role of special success in an election is made to win a prize In the game machine which enabled it to perform the game in the special game mode in which profits grant probability becomes high rather than the normal mode, while the continuation accessory mode in which the accessory game of multiple times is performed continuously is contained once [at least] or more, the aforementioned special game mode A number-of-times determination means of a game to determine the number of times of a game of the aforementioned continuation accessory shift game while the continuation accessory shift game for making it shift to the aforementioned continuation accessory mode consists of increase modes in a continuation accessory performed the number of predetermined times [Claim 4] The game machine characterized by providing the following A role determination means of success in an election by which operation of a game start means determines either HAZURE or two or more kinds of roles of success in an election Answer operation of the reel halt operation means established for every Lille, and it has the reel halt control means which perform halt control of the reel which corresponds so that the pattern which constitutes the role of success in an election decided with the aforementioned role determination means of success in an election may stop on the same winning-a-prize line. When the role of success in an election determined with the aforementioned role determination means of success in an election is a role of success in an election specially and the role of special success in an election is made to win a prize In the game machine which enabled it to perform the game in the special game mode in which profits grant probability becomes high rather than the normal mode, while the continuation accessory mode in which the accessory game of multiple times is performed continuously is contained once [at least] or more, the aforementioned special game mode While the continuation accessory shift game for making it shift to the aforementioned continuation accessory mode consists of increase modes in a continuation accessory performed the number of predetermined times A number-of-times determination means of winning a prize to determine the number of times in the accessory game in the aforementioned continuation accessory mode for which a prize can be won when the role of success in an election determined with the aforementioned role determination means of success in an election is the aforementioned role of special success in an election [Claim 5] the claims 1-4 characterized by determining the aforementioned number of times of a game, and the number of times of winning a prize from the number difference of the number of the game medium paid out during the game of the number of times of predetermined until it shifts to the aforementioned special game

mode, and the number of the game medium thrown in for the game -- either -- the

game machine of a publication

[Claim 6] the claims 1-4 characterized by determining the aforementioned number of times of a game, and the number of times of winning a prize according to the number of the game medium paid out during the game of the number of times of predetermined until it shifts to the aforementioned special game mode — either — the game machine of a publication

[Claim 7] the claims 1-4 characterized by the aforementioned number of times of a game and the number of times for which a prize can be won being performed by selection of the game person within the period from the end of a game to the start of a game — either — the game machine of a publication

[Claim 8] the claims 1–4 characterized by performing control of the number of times of the above for which a prize can be won, or the aforementioned number of times of a game which forms so that it may become complementary with either at least, and brings expenditure with the aforementioned special game mode close to the aforementioned expected value for the expenditure expected value in the aforementioned special game mode, or 7 — either — the game machine of a publication

[Claim 9] A role determination means of success in an election by which operation of a game start means determines either HAZURE or two or more kinds of roles of success in an election, The reel halt control means which perform halt control of the reel which corresponds so that the pattern which constitutes the role of success in an election which answered operation of the reel halt operation means established for every Lille, and was decided with the aforementioned role determination means of success in an election may stop on the same winning-a-prize line, When the role of success in an election determined with the aforementioned role determination means of success in an election is a role of success in an election specially and the role of special success in an election is made to win a prize When it consists of continuation accessory modes in which the accessory game of the number of times of predetermined continues, and the aforementioned special game mode other than a means to perform the game in the special game mode in which profits grant probability becomes high is performed rather than the normal mode The program for operating a computer as a number-of-times determination means of an accessory game to determine the number of times of a game in the aforementioned continuation accessory mode.

[Claim 10] A role determination means of success in an election by which operation of a game start means determines either HAZURE or two or more kinds of roles of success in an election, The reel halt control means which perform halt control of the reel by which the pattern which constitutes the role of success in an election which answered operation of the reel halt operation means established for every Lille, and was decided with the aforementioned role determination means of success in an election corresponds on the same winning—a—prize line so that it may stop, When the role of success in an election determined with the aforementioned role

determination means of success in an election is a role of success in an election specially and the role of special success in an election is made to win a prize When it consists of continuation accessory modes in which the accessory game of the number of times of predetermined continues, and the aforementioned special game mode other than a means to perform the game in the special game mode in which profits grant probability becomes high is performed rather than the normal mode The program for operating a computer as a number—of—times determination means of winning a prize to determine the number of times in the accessory game of the number of times of predetermined which constitutes the aforementioned continuation accessory mode for which a prize can be won.

[Claim 11] A role determination means of success in an election by which operation of a game start means determines either HAZURE or two or more kinds of roles of success in an election, The reel halt control means which perform halt control of the reel which corresponds so that the pattern which constitutes the role of success in an election which answered operation of the reel halt operation means established for every Lille, and was decided with the aforementioned role determination means of success in an election may stop by the display window, When the role of success in an election determined with the aforementioned role determination means of success in an election is a role of success in an election specially and the role of special success in an election is made to win a prize While the continuation accessory mode in which the accessory game of multiple times continues and the aforementioned special game mode other than a means to perform the game in the special game mode in which profits grant probability becomes high is performed rather than the normal mode is contained once [at least] or more The program for operating a computer as a number-of-times determination means of a game to determine the number of times of a game of the aforementioned continuation accessory shift game, when the continuation accessory shift game for making it shift to the aforementioned continuation accessory mode consists of increase modes in a continuation accessory performed the number of predetermined times.

[Claim 12] A role determination means of success in an election by which operation of a game start means determines either HAZURE or two or more kinds of roles of success in an election, The reel halt control means which perform halt control of the reel which corresponds so that the pattern which constitutes the role of success in an election which answered operation of the reel halt operation means established for every Lille, and was decided with the aforementioned role determination means of success in an election may stop by the display window, When the role of success in an election determined with the aforementioned role determination means of success in an election is a role of success in an election specially and the role of special success in an election is made to win a prize While the continuation accessory mode in which the accessory game of multiple times continues and the aforementioned special game mode other than a means to perform the game in the special game mode in which profits grant probability becomes high is performed

rather than the normal mode is contained once [at least] or more When the continuation accessory shift game for making it shift to the aforementioned continuation accessory mode consists of increase modes in a continuation accessory performed the number of predetermined times The program for operating a computer as a number—of—times determination means of winning a prize to determine the number of times in the accessory game of the multiple times which constitute the aforementioned continuation accessory mode for which a prize can be won.

[Claim 13] a claim — the storage which can read the program by computer while the program of a publication is memorized nine to 12 either

[Translation done.]

* NOTICES *

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- 1. This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] this invention relates to the game machine, program, and storage which are used installing in amusement centers, such as a pachinko parlor.

[0002]

[Description of the Prior Art] The slot machine used installing in amusement centers, such as a pachinko parlor, is called a pachislot machine, fixed value is given to the medal used as the game medium, and the medal which gained by performing a game (game) can be exchanged for various premiums. For this reason, as for a game person, it is general that the base which the right which performs the bonus game which becomes easy to obtain success in an election probable only for the purpose of saying [gaining a medal in large quantities] tends to obtain tends to be chosen, and it is going to perform a game. On the slot machine, the reel has structure driven with a stepping motor, the electronic lottery based on the sampling of a random number determines the existence of success in an election, and its kind, and halt

control of a reel is performed corresponding to this determination. Therefore, the probability of occurrence of the success in an election by the electronic lottery can be adjusted in soft, the state of becoming easy to obtain success in an election can be made, and the bonus game has been made to be made using this. In addition, since a pachislot machine is mentioned as an example and explained, although a medal is used as a game medium in this specification, other media, such as coin and a pachinko ball, are included as a game medium. Moreover, carrying out the bed of the medal by which the credit was carried out with a bed button etc. also contains in "an injection of a medal (game medium)."

[0003] There are a game performed by shifting, for example to big bonus (following, BB) mode as a bonus game, a game performed by shifting to regular bonus (following, RB) mode, and these games can be performed by making BB and RB which are a role of success in an election specially win a prize.

[0004] For example, the shift to RB mode is ended by a game being performed, and winning a prize a maximum of 8 times on the medal bed of one sheet, or performing a maximum of 12 times of games, when the pattern of a reel is arranged with "BAR-BAR-BAR." Moreover, the shift to BB mode is performed when the pattern of a reel is arranged with "7-7-7", and in the game in this BB mode, the game in RB mode mentioned above is repeated 2 to 3 times. Moreover, in BB mode, if there is also a RB introduction game to which the right which carries out the bed of the medal of 1-3 sheets under high success-in-an-election probability, and performs a game is granted and a success-in-an-election (bonus in) pattern gathers during [this] the RB introduction game before shifting to RB mode, it will shift to RB mode. When the game under this RB mode or BB mode is performed, a lot of medals can be gained as compared with the game in the normal mode. In addition, in this specification, it considers that the role of success in an election cast lots by the electronic lottery in the state before winning a prize and winning [arranging the reel pattern corresponding to the role of success in an election, and] a prize as internal winning a prize.

[0005]

[Problem(s) to be Solved by the Invention] however, the end conditions in RB mode or BB mode are the same, for example, when an unskilled operator performs them, in order to make them shift to RB mode, with many RB introduction games left while a lot of medals are obtained, since RB introduction game is performed until end condition last-minute and RB mode is performed in BB mode, when a game person is an expert for example, they serve as acquisition medal number of sheets fewer than an expert Moreover, since the end conditions in RB mode and BB mode are fixation, they have the fault that the game in RB mode and BB mode will become monotonous.

[0006] this invention aims at offering the game machine, program, and storage which enabled it to prevent monotonous-ization of the game in RB mode and BB mode. [0007]

[Means for Solving the Problem] In order to attain the above-mentioned purpose, the game machine of this invention A role determination means of success in an election by which operation of a game start means determines either HAZURE or two or more kinds of roles of success in an election, Answer operation of the reel halt operation means established for every Lille, and it has the reel halt control means which perform halt control of the reel which corresponds so that the pattern which constitutes the role of success in an election decided with the aforementioned role determination means of success in an election may stop on the same winning-a-prize line. When the role of success in an election determined with the aforementioned role determination means of success in an election is a role of success in an election specially and the role of special success in an election is made to win a prize Enable it to perform the game in the special game mode in which profits grant probability becomes high rather than the normal mode, and while constituting the aforementioned special game mode from continuation accessory mode in which the accessory game of multiple times is performed continuously A number-of-times determination means of a game to determine the number of times of a game of the aforementioned accessory game is established. In addition, with profits grant probability, for example, the rate of reward balls is mentioned. [0008] Moreover, a role determination means of success in an election by which operation of a game start means determines either HAZURE or two or more kinds of roles of success in an election, Answer operation of the reel halt operation means established for every Lille, and it has the reel halt control means which perform halt control of the reel which corresponds so that the pattern which constitutes the role of success in an election decided with the aforementioned role determination means of success in an election may stop on the same winning-a-prize line. When the role of success in an election determined with the aforementioned role determination means of success in an election is a role of success in an election specially and the role of special success in an election is made to win a prize Enable it to perform the game in the special game mode in which profits grant probability becomes high rather than the normal mode, and while constituting the aforementioned special game mode from continuation accessory mode in which the accessory game of multiple times is performed continuously A number-of-times determination means of winning a prize to determine the number of times in the accessory game of the multiple times which constitute the aforementioned continuation accessory mode for which a prize can be won is established.

[0009] Moreover, a role determination means of success in an election by which operation of a game start means determines either HAZURE or two or more kinds of roles of success in an election, Answer operation of the reel halt operation means established for every Lille, and it has the reel halt control means which perform halt control of the reel which corresponds so that the pattern which constitutes the role of success in an election decided with the aforementioned role determination means of success in an election may stop on the same winning—a—prize line. When the role

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of success in an election determined with the aforementioned role determination means of success in an election is a role of success in an election specially and the role of special success in an election is made to win a prize Enable it to perform the game in the special game mode in which profits grant probability becomes high rather than the normal mode, and while the continuation accessory mode in which the accessory game of multiple times is performed continuously is contained once [at least] or more, the aforementioned special game mode While the continuation accessory shift game for making it shift to the aforementioned continuation accessory mode consists of increase modes in a continuation accessory performed the number of predetermined times, a number—of—times determination means of a game to determine the number of times of a game of the aforementioned continuation accessory shift game is established.

[0010] Moreover, a role determination means of success in an election by which operation of a game start means determines either HAZURE or two or more kinds of roles of success in an election, Answer operation of the reel halt operation means established for every Lille, and it has the reel halt control means which perform halt control of the reel which corresponds so that the pattern which constitutes the role of success in an election decided with the aforementioned role determination means of success in an election may stop on the same winning-a-prize line. When the role of success in an election determined with the aforementioned role determination means of success in an election is a role of success in an election specially and the role of special success in an election is made to win a prize Enable it to perform the game in the special game mode in which profits grant probability becomes high rather than the normal mode, and while the continuation accessory mode in which the accessory game of multiple times is performed continuously is contained once [at least] or more, the aforementioned special game mode While the continuation accessory shift game for making it shift to the aforementioned continuation accessory mode consists of increase modes in a continuation accessory performed the number of predetermined times When the role of success in an election determined with the aforementioned role determination means of success in an election is the aforementioned role of special success in an election, a number-oftimes determination means of winning a prize to determine the number of times in the accessory game in the aforementioned continuation accessory mode for which a prize can be won is established.

[0011] In addition, as for the aforementioned number of times of a game, and the number of times of winning a prize, it is desirable to be determined from the number difference of the number of the game medium paid out during the game of the number of times of predetermined until it shifts to the aforementioned special game mode, and the number of the game medium thrown in for the game. Moreover, as for the aforementioned number of times of a game, and the number of times of winning a prize, it is desirable to be determined according to the number of the game medium paid out during the game of the number of times of predetermined until it

shifts to the aforementioned special game mode.

[0012] Moreover, as for the aforementioned number of times of a game, and the number of times for which a prize can be won, it is desirable to be carried out by selection of the game person within the period from the end of a game to the start of a game. Moreover, it is desirable to perform control of the number of times of the above for which a prize can be won, or the aforementioned number of times of a game which forms so that it may become complementary with either at least, and brings expenditure with the aforementioned special game mode close to the aforementioned expected value for the expenditure expected value in the aforementioned special game mode.

[0013] Moreover, a role determination means of success in an election by which operation of a game start means determines either HAZURE or two or more kinds of roles of success in an election as a program, The reel halt control means which perform halt control of the reel which corresponds so that the pattern which constitutes the role of success in an election which answered operation of the reel halt operation means established for every Lille, and was decided with the aforementioned role determination means of success in an election may stop on the same winning-a-prize line, When the role of success in an election determined with the aforementioned role determination means of success in an election is a role of success in an election specially and the role of special success in an election is made to win a prize When it consists of continuation accessory modes in which the accessory game of the number of times of predetermined continues, and the aforementioned special game mode other than a means to perform the game in the special game mode in which profits grant probability becomes high is performed rather than the normal mode It is for operating a computer as a number-of-times determination means of an accessory game to determine the number of times of a game in the aforementioned continuation accessory mode.

[0014] Moreover, a role determination means of success in an election by which operation of a game start means determines either HAZURE or two or more kinds of roles of success in an election as a program, The reel halt control means which perform halt control of the reel by which the pattern which constitutes the role of success in an election which answered operation of the reel halt operation means established for every Lille, and was decided with the aforementioned role determination means of success in an election corresponds on the same winning—a-prize line so that it may stop, When the role of success in an election determined with the aforementioned role determination means of success in an election is a role of success in an election specially and the role of special success in an election is made to win a prize When it consists of continuation accessory modes in which the accessory game of the number of times of predetermined continues, and the aforementioned special game mode other than a means to perform the game in the special game mode in which profits grant probability becomes high is performed rather than the normal mode It is for operating a computer as a number—of—times

determination means of winning a prize to determine the number of times in the accessory game of the number of times of predetermined which constitutes the aforementioned continuation accessory mode for which a prize can be won. [0015] Moreover, a role determination means of success in an election by which operation of a game start means determines either HAZURE or two or more kinds of roles of success in an election as a program, The reel halt control means which perform halt control of the reel which corresponds so that the pattern which constitutes the role of success in an election which answered operation of the reel halt operation means established for every Lille, and was decided with the aforementioned role determination means of success in an election may stop by the display window. When the role of success in an election determined with the aforementioned role determination means of success in an election is a role of success in an election specially and the role of special success in an election is made to win a prize While the continuation accessory mode in which the accessory game of multiple times continues and the aforementioned special game mode other than a means to perform the game in the special game mode in which profits grant probability becomes high is performed rather than the normal mode is contained once [at least] or more When the continuation accessory shift game for making it shift to the aforementioned continuation accessory mode consists of increase modes in a continuation accessory performed the number of predetermined times, it is for operating a computer as a number-of-times determination means of a game to determine the number of times of a game of the aforementioned continuation accessory shift game.

[0016] Moreover, a role determination means of success in an election by which operation of a game start means determines either HAZURE or two or more kinds of roles of success in an election as a program, The reel halt control means which perform halt control of the reel which corresponds so that the pattern which constitutes the role of success in an election which answered operation of the reel halt operation means established for every Lille, and was decided with the aforementioned role determination means of success in an election may stop by the display window, When the role of success in an election determined with the aforementioned role determination means of success in an election is a role of success in an election specially and the role of special success in an election is made to win a prize While the continuation accessory mode in which the accessory game of multiple times continues and the aforementioned special game mode other than a means to perform the game in the special game mode in which profits grant probability becomes high is performed rather than the normal mode is contained once [at least] or more When the continuation accessory shift game for making it shift to the aforementioned continuation accessory mode consists of increase modes in a continuation accessory performed the number of predetermined times It is for operating a computer as a number-of-times determination means of winning a prize to determine the number of times in the accessory game of the multiple times

which constitute the aforementioned continuation accessory mode for which a prize can be won.

[0017] Moreover, it is the storage which can read the program by computer while the program of the above-mentioned publication is memorized as a storage.
[0018]

[Embodiments of the Invention] As shown in drawing 1, the slot machine 2 is equipped with BB mode set up as special game mode which shifts when the role of BB shift which is a role of success in an election specially is made to win a prize besides the normal mode. BB mode consists of RB introduction games of the number of times of predetermined for making it introduce to at least 1 times or more of RB mode and this RB mode, and when the role of BB shift is made to win a prize, the probability of obtaining many medals becomes high. In addition, RB mode is the mode in which the accessory game of an one-sheet bet carries out multiple-times continuation, and is performed. Thereby, in an accessory game and RB mode, continuation accessory mode and BB mode function [the accessory game of an one sheet bet] as increase modes in a continuation accessory, respectively. [0019] Four pattern display windows 5-8 are formed in the front door 4 of a case 3, and this slot machine 2 is built into it in the inner part of each display window free [rotation of 1st reel 9a, 2nd reel 9b, 3rd reel 9c, and the sub reel 10]. Various patterns are arranged by the periphery of the 1st - the 3rd reel 9a-9c at constant pitch as everyone knows, and after the reel has stopped, three patterns per one reel are observed through a corresponding display window. Thereby, the winning-a-prize line of the shape of a straight line which combined one pattern of each reel at a time is set up the-five sum total of two three horizontal slant. In addition, although the display window was formed with this operation gestalt so that it might correspond to each reel, it is not necessary to limit to this and you may make it display all reels by one display window.

[0020] When the medal of one sheet is thrown in from medal input port 11 in advance of the start of a game, the winning-a-prize line beside [one] central is validated, and five winning-a-prize lines to which added three width in two sheets, and it added two slant further in three sheets are validated. Hereafter, let the validated winning-a-prize line be a winning-a-prize effective line. Moreover, it is possible to store a medal within the limit of 50 sheets, and the number of sheets of the medal currently stored is displayed by the credit number-of-sheets drop 12. [0021] The sub reel 10 begins rotation with other reels 9a-9c, when the start lever 13 for a game start is operated, when the role of BB shift which is an electronic lottery at the time of operation of the start lever 13, for example, is made to shift to BB mode casts lots, it carries out BB success in an election, it displays "7", and notifies a game person of carrying out BB success in an election.

[0022] Various kinds of operation buttons, such as an one-sheet bed button operated when performing a game, where the credit of the medal is carried out, a

MAX bed button, and a pay out button, are prepared in the upper control panel of

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the stop buttons 14a-14c which are reel halt operation meanses. Since each function of these operation buttons is common knowledge, it is omitted about the detail. The mode change button 15 is formed in the sides, such as an one-sheet bed button, a MAX bed button, and a pay out button, and it is prepared in order to choose the number of times of a game of the game in BB mode. The mode display 16 is formed near the mode change button of a front door. The mode drop 38 (refer to drawing 2) which consists of light emitting devices, such as Light Emitting Diode, is arranged at the tooth-back side of this mode display 16, and a Light Emitting Diode display changes in response to press of the mode change button 15. [0023] As shown in drawing 2, the operation of a slot machine 2 is controlled with the microcomputer which contains CPU20 and memory 21 fundamentally. The medal sensor 22 detects the proper medal thrown in from medal input port 11, and inputs it into control-section 20a of CPU20. A selector is incorporated in the inner part of medal input port 11, and an un-proper medal is discharged by the medal saucer 18 (refer to drawing 1) through the medal expenditure mouth 17. Moreover, a selector is discharged on the medal saucer 18 also about the medal thrown in in the state that the middle of being a game and various kinds of operation buttons are pushed], without making it go via the medal sensor 22, when an injection of a medal is performed to unsuitable timing.

[0024] In addition, the number of sheets of the medal thrown in in advance of the start of a game is discharged by the medal saucer 18, without also detecting the medal thrown in after the 4th sheet by the medal sensor 22, when not using the credit function, since it is restricted to 1-3 sheets. ON/OFF of a credit function are changed for every push of a pay out button. And when a credit function is an ON state, the medal thrown in after the 4th sheet is also detected by the medal sensor 22, and is stored inside a slot machine 2 within the limit of 50 sheets. Digital display of the number of sheets of the stored medal is carried out with the credit numberof-sheets drop 12. When using the credit function, closing operation of a medal is performed by operation of the one-sheet bed button mentioned above and a MAX bed button, and the bed number of sheets is subtracted from credit number of sheets by serial. Moreover, as a result of a game, when a hit is obtained, the credit also of the dividend medal is carried out, and when a pay out button is operated, the medal by which the credit was carried out pays out the medal saucer 18. [0025] Control-section 20a carries out counting of the number of sheets of the medal of 1-3 sheets thrown in in advance of the start of a game based on the detection signal from the medal sensor 22, and, thereby, the number of a winning-aprize effective line is determined. Moreover, counting of the bed number of sheets of the medal thrown in for every start of a game is integrated and carried out by the counter prepared in the interior of control-section 20a. In addition, counting of the credit number of sheets is carried out by another credit medal counter which omitted illustration.

[0026] The mode circuit changing switch sensor 23 is turned on when the mode

change button 15 is pressed, and it turns and outputs a mode change signal to control-section 20a. In control-section 20a, a proceed to select signal is outputted to the number-of-times determination section 35 of a game later mentioned whenever this mode change signal is inputted. Moreover, in control-section 20a, a display change signal is outputted to the mode drop 38 later mentioned whenever a mode change signal is inputted. In addition, when performing the game in the inside of a game, or BB mode and a mode change signal is inputted into control-section 20a, the mode change signal is repealed.

[0027] The start switch sensor 24 is turned on when the start lever 13 is operated, and it turns and outputs a game start signal to control-section 20a. In response to a game start signal, control-section 20a starts processing of a game while rotating the 1st – the 3rd reel 9a–9c, and the sub reel 10 based on the game executive program stored in the ROM field of memory 21. A drive and halt control of each reel are performed by the reel drive controller 27. Each reel fixes to an individual stepping motors [28a–28d] driving shaft, and control of each reel is performed by controlling the drive of each stepping motors 28a–28d. In addition, the RAM field of memory 21 serves as a working area, and it is used for temporary storage, rewriting, etc. of a flag, data, etc. which are used for every game at each time.

[0028] The halt position of a reel can be decided by being able to rotate stepping motors 28a–28d by the angle of rotation according to the number of the supplied driving pulse, and being able to control the angle of rotation of the 1st – the 3rd reel 9a–9c, and the sub reel 10 by controlling the supply number of a driving pulse by control–section 20a, and severing supply of a driving pulse. Moreover, the reflective signal sections 29a–29d are formed in the criteria position at one, and Photosensors 30a–30d carry out photoelectrical detection of the passage of each reflective signal section 29 for the one revolution of every at each reel. The detection signal by Photosensors 30a–30d is outputted to control–section 20a as a reset signal for every Lille.

[0029] A pulse counter is prepared in the interior of control-section 20a for every stepping motor, and counting of the number of the driving pulse supplied to each stepping motor is carried out. The counted value of this pulse counter is cleared whenever a reset signal is inputted, and a rise count is again carried out. Therefore, while the number of the driving pulse corresponding to the angle of rotation in 1 rotation of each reel updates to serial, it will be saved at each pulse counter.

[0030] A pattern table is stored in the ROM field of memory 21, and the number of the driving pulse corresponding to the angle of rotation from the criteria position of each reel and the pattern code which expresses with a reel each pattern arranged at constant pitch are matched with the pattern table. Therefore, by supervising the counted value of a pulse counter for every Lille, if it can discriminate which pattern has been moving onto a central winning—a—prize effective line and how many reels are rotated, it can predict whether the target pattern moves onto the winning—a—prize effective line.

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[0031] The sensor is formed in the interior of the stop buttons 14a-14c, and when the stop buttons 14a-14c are pressed, the stop signal for every Lille is inputted towards control-section 20a. The start lever 13 is operated, rotation of all reels starts, and when these rotations reach regular speed, operation of the stop buttons 14a-14c is validated. Then, halt control of the 1st - the 3rd reel 9a-9c which correspond, respectively is started by carrying out press operation of these. As mentioned above, in the stop buttons 14a-14c, reel halt operation means and control-section 20a functions as reel halt control means, respectively. In addition, when two or more stop buttons 14a-14c are operated, only a reel with earlier timing stops, and when it operates simultaneously completely, any reel stops. [0032] Control-section 20a operates the electronic lottery section 31 in response to a game start signal. Including the random-number-generation section and a random number value sampling circuit, the electronic lottery section 31 casts lots in one random number value, whenever a game is started, and it determines the role of success in an election in the game performed now according to the value in the role determination section 32 of success in an election. Thus, control-section 20a, the electronic lottery section 31, and the role determination section 32 of success in an election function as a role determination means of success in an election. [0033] The 1st success-in-an-election table used for the determination of the role of success in an election in each game under the normal mode, the 2nd success-inan-election table used when the role of BB shift carries out internal winning a prize, the 3rd success-in-an-election table used in RB introduction game in BB mode, and the 4th success-in-an-election table used in RB mode are prepared in the role determination section 32 of success in an election. The success-in-an-election signal showing the kind of success in an election which cast lots in the electronic lottery section 31 is sent to the role determination section 32 of success in an election, and the role signal of success in an election corresponding to this successin-an-election signal is outputted to control-section 20a from the role determination section 32 of success in an election. In addition, in control-section 20a, the success-in-an-election flag corresponding to the role signal of success in an election is written in the RAM field of memory 21.

[0034] The number—of—times determination section 35 of a game determines the number of times A in RB mode which constitutes BB mode for BB mode for which a prize can be won, and the number of times B of a game of RB introduction game in response to the output signal from the mode circuit changing switch sensor 23. The number—of—times table 37 of a game is formed in this number—of—times determination section 35 of a game. This number—of—times table 37 of a game consists of table data which consist of combination of the number of times A in RB mode for which a prize can be won, and the number of times B of a game of RB introduction game. In addition, the combination of the number of times A in RB mode for which a prize can be won, and the number of times B of a game of RB introduction game is set up so that the total of the net increase medal number of

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sheets at the time of performing BB mode (acquisition medal number-of-sheets-injection medal number of sheets) may turn into predetermined number of sheets (for example, 430 sheets) mostly. In this example, the number of times A for which a prize can be won makes three kinds, 6, 8, and 10, and the number of times B of a game of RB introduction game three kinds, 5, 15, and 25. 6 and the number of times B of a game explain the case where the 2nd BB mode and the number of times A for which a prize can be won are 25 about the case where the 1st BB mode and the number of times A for which a prize can be won are [8 and the number of times B of a game] 15 about the case where the number of times A for which a prize can be won is [10 and the number of times B of a game] 5, as the 3rd BB mode. In addition, the number of times A in this RB mode for which a prize can be won, and the number of times B of a game of RB introduction game shall not be limited to the above-mentioned publication, and shall be set up suitably.

[0035] In order that the mode drop 38 may be formed in the tooth back of the mode display 16, for example, may indicate by the mode, it consists of three Light Emitting Diode light emitting devices and a driver. In the mode drop 38, a mode display is changed in response to the display change signal from control—section 20a. In addition, in the case of the 1st BB mode, in the case of the 2nd BB mode, a central Light Emitting Diode light emitting device lights up, and, in the case of the 3rd BB mode, a right—hand side Light Emitting Diode light emitting device lights up [a left—hand side Light Emitting Diode light emitting device].

[0036] The number counter 39 of games is formed in order to count the number of times of a game of RB introduction game in BB mode, and the number of times of a game of the accessory game in RB mode, respectively. In control-section 20a, when the number of times of a game as which the advancing number of times of a game was determined is reached with reference to the counted value of this number counter 39 of games, BB mode or RB mode is terminated.

[0037] When the role of success in an election wins a prize, the medal hopper 40 pays out the number of dividend medals corresponding to the role of success in an election to the medal saucer 18, or adds the convention number of sheets to a credit counter. In addition, the dividend table which determined the number of sheets of a dividend medal for every kind of role of success in an election is stored in the ROM field of memory 21, and control-section 20a reads this and drives the medal hopper 40.

[0038] The initial-setting input section 41 is formed in the interior of a case 3, and where the front door 4 is opened, it becomes operational. When the electric power switch used as a main power supply, a setting change button, and BB mode are completed, the selecting switch which can choose whether it is made the close is prepared in this initial-setting input section 41. In addition, a change of the rate of pay out is made by press of a setting change button, and it has come to be able to carry out adjustable [of the rate of pay out] among six stages. At the time of change of the rate of pay out, adjustment of group assignment of each success-in-

an-election table is also performed.

[0039] Next, an operation of the slot machine constituted by doing in this way is explained based on the flow chart of drawing 3. After carrying out closing operation of the medal of 1–3 sheets in advance of the start of a game, it chooses whether BB mode is performed in either the 1st – the 3rd BB mode by pressing the mode change button 15. For example, a setup before a game start is set as the 2nd BB mode, and when BB mode which a game person wants to perform is the 3rd BB mode, a mode change button is pressed once. In addition, in carrying out in the 1st BB mode, it presses a mode change button twice.

[0040] If a mode change signal is outputted from the mode circuit changing switch sensor 23 by press of the mode change button 15, while outputting the number—of—times selection signal of a game towards the number—of—times determination section 36 of a game, by it, a display change signal will be outputted to the mode drop 38 by control—section 20a. The Light Emitting Diode light emitting device of the center used as the display in the 2nd BB mode is switched off, and the Light Emitting Diode light emitting device of the right—hand side used as the display in the 3rd BB mode is made to turn on with the mode drop 38 in response. On the other hand, the number—of—times selection section 36 of a game chooses from the number—of—times table 37 of a game the number of times A in RB mode corresponding to the 2nd BB mode (A= 6) for which a prize can be won, and the number of times B of a game of RB introduction game (B= 25). And these numeric values are written in the RAM field of memory 21. In addition, when a mode change button is pressed after pushing the start lever 13, a mode change signal becomes invalid.

[0041] Then, the game in the normal mode is started by operation of the start lever 13, and the 1st – the 3rd reel 9a–9c, and the sub reels 10 begin rotation all at once. It can come, simultaneously a random number is sampled in the electronic lottery section 31, and it outputs to the role determination section 32 of success in an election. Using this random number value, in the role determination section 32 of success in an election, with reference to the 1st success—in—an—election table, the role of success in an election is determined, and the success—in—an—election signal is outputted to control—section 20a.

[0042] When the role of success in an election determined in the role determination section 32 of success in an election is a role of BB shift, control-section 20a writes BB success-in-an-election flag in the RAM field of memory 21. And if a game person places neatly "7-7-7" which plays a role of BB shift on the same winning-a-prize effective line, it will shift to the game in BB mode. After making the role of BB shift win a prize, even if it presses the mode change button 15 at this time, the mode change signal is repealed in control-section 20a. In addition, when becoming roles of success in an election other than the role of BB shift, or HAZURE in the role determination section 32 of success in an election, game processing is usually performed.

[0043] If it shifts to BB mode, refer to the number of times A in the accessory game

in RB mode memorized to the RAM field of memory 21 (A= 6) for which a prize can be won, and the number of times B of a game of RB introduction game (B= 25) for control-section 20a. And a push on a start button 13 starts RB shift game. In this BB mode, the success-in-an-election table used in the role determination section 32 of success in an election has changed to the 2nd success-in-an-election table, and since the role of small is easy to win, it becomes possible by performing BB mode to obtain a lot of medals. In addition, RB mode contained in this BB mode is the jack game of an one-sheet cliff, and 1 time of RB mode is completed by performing winning a prize (A= 6) or the accessory game of the number of times A for which a prize can be won 12 times in this jack game. And when the number of times B of a game (B= 25 times) is digested for RB introduction game or RB mode is digested 3 times, BB mode is completed and it shifts to the game in the normal mode.

[0044] In addition, to the case in the 1st BB mode, since the number of times B in 5 times and RB mode for which a prize can be won is 10 times, it will increase net increase medal number of sheets only in RB mode, and the number of times A of a game of RB introduction game serves as BB mode of the beginner sense at it. On the other hand, in the 3rd BB mode, the number of times A of a game of RB introduction game serves as BB mode of the expert sense in which it can also earn RB introduction game since the number of times B in 25 times and RB mode for which a prize can be won is 6 times. This becomes possible to choose BB mode according to a game person's level of skill. In addition, since the maximum of the net increase medal number of sheets in these BB(s) mode is set as the predetermined value (for example, 430 sheets), a great difference does not come out of it to the net increase medal number of sheets got by the game person.

[0045] Moreover, you may store the program for performing the procedure and function which are shown with the functional block diagram of drawing 2, and the flow chart of drawing 3 with the control unit of a slot machine in storages, such as a flexible disk and an optical disk. For example, as shown in drawing 4, a means to measure the elapsed time from the start of a game other than the program for realizing the role determination means of success in an election and reel control means, and a means to judge whether halt control of a reel is changed by the measured time are recorded on the storage 50. The reader 52 in which it was contained by the slot machine 51 is loaded with this storage 50, the program is installed in a slot machine, or a game is performed where a reader 52 is loaded with a storage 50. In addition, a sign 53 is CPU and a sign 54 is memory.

[0046] Moreover, a slot machine can be made to distribute the aforementioned program using the Internet instead of installing using a storage. Moreover, it can install in a personal computer by adding the program which performs basic operation of slot machines, such as a function to turn a reel, and a function to stop each reel, and a slot machine game can be carried out to the above-mentioned program on a monitor.

[0047] Although two or more BB modes in which the number of times of winning a prize in RB mode differed from the number of times of a game of RB shift game were formed with this operation gestalt so that the upper limit of the net increase medal number of sheets obtained might turn into a predetermined value, in addition, you may establish an upper limit at the number of times of winning a prize among RB game for the ability coming. In this case, when the number of times of winning a prize in RB mode reaches a upper limit, by this which kicks at halt control of a reel and is changed into control even if it has not reached the number of times for which a prize can be won, it becomes impossible to make a prize able to win in the remaining accessory game, and the rate of reward balls in BB mode (expected value) can be brought close to a predetermined value.

[0048] With this operation gestalt, although it enables it to choose BB mode from the end of a game before the game start of the following game, when it shifts, for example to BB mode, it is made to choose BB mode, or you may set up suitably. [0049] When the role of BB shift wins, you may make it make BB mode to be used determine by the lottery, although it was made to make a game person choose BB mode performed with this operation gestalt. In this case, a hope can be given to a game person to RB mode in BB mode because it is made not to perform information towards a game person. Moreover, you may make it choose the number of times of a game of RB introduction game which constitutes shifting BB mode, and the number of times in RB mode for which a prize can be won based on either of the differences (net increase medal number of sheets) of the acquisition medal number of sheets in the predetermined game section in the normal mode or acquisition medal number of sheets, and injection medal number of sheets. By doing in this way, it becomes the small slot machine of the bias of the rate of reward balls.

[0050] Moreover, you may make it, make either the number of times of a game of RB introduction game in BB mode, or the number of times in RB mode for which a prize can be won change at the time of change of the rate of pay out in addition to this. On a slot machine, usually, the rate of pay out can adjust six stages now, and changes either the number of times of a game of RB introduction game in BB mode, or the number of times in RB mode for which a prize can be won according to six steps of rates of pay out. Thereby, when it is a low setup of the rate of pay out, that there is little number of times for which a prize can be won, few BB mode of the number of times of a game is performed, and when the rate of pay out is high, BB mode with it comes to be performed. [to the number of times of a game] [much / there is much number of times for which a prize can be won, or] Moreover, in a low setup of the rate of pay out when making regularity expenditure expected value in BB mode regardless of the rate of pay out, when BB mode with it is a setup with the high rate of pay out, few BB mode of the number of times of a game comes to be performed that there is little number of times for which a prize can be won. [to the number of times of a game] [much / there is much number of times for which a prize can be won, or] In addition, when it pays out by low setup of the rate of pay

out and expected value is reached, in the game after it, the rate which kicks at halt control of each reel and is performed by control can be brought close to the expenditure expected value set up beforehand by making [many] it. [0051] Although it was made to make this invention choose about the number of times of a game of RB shift game in BB mode, and the number of times in RB mode under BB mode for which a prize can be won, it can be similarly carried out about RB mode.

[0052]

[Effect of the Invention] As mentioned above, according to the game machine of this invention, specially, while the continuation accessory mode in which the accessory game of the predetermined number of times of a game is performed continuously, and continuation accessory mode are contained once [at least] or more, game mode When the role of success in an election as which the continuation accessory shift game for making it shift to the aforementioned continuation accessory mode consisted of increase modes in a continuation accessory performed two or more times, and was determined with the aforementioned role determination means of success in an election is the aforementioned role of special success in an election A hope can be given to a game person, while being able to diversify continuation accessory mode and the increase mode in a continuation accessory, since the number of times of a game and the number of times for which a prize can be won of the aforementioned accessory game were chosen.

[0053] Moreover, specially, the expenditure expected value in game mode is formed so that it may become complementary with the number of times for which a prize can be won, and since it is lost that the shell which was made to carry out expenditure with the aforementioned special game mode to regularity, and a lot of medals pay out, it becomes the game machine about which he can feel easy for an amusement center.

[Translation done.]

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[Brief Description of the Drawings]

[Drawing 1] It is the perspective diagram showing the appearance of the slot machine which carried out this invention.

[Drawing 2] It is the functional block diagram showing the electric composition of the slot machine shown in drawing 1.

[Drawing 3] It is the flow chart which shows the flow of a game.

[Drawing 4] It is explanatory drawing in the case of installing in a slot machine the storage with which the program was stored.

[Description of Notations]

- 2 Slot Machine
- 15 Mode Change Button
- 16 Mode Drop
- 23 Mode Circuit Changing Switch Sensor
- 35 Number-of-Times Determination Section of Game
- 37 Number-of-Times Table of Game
- 38 Mode Drop
- 39 The Number Counter of Games

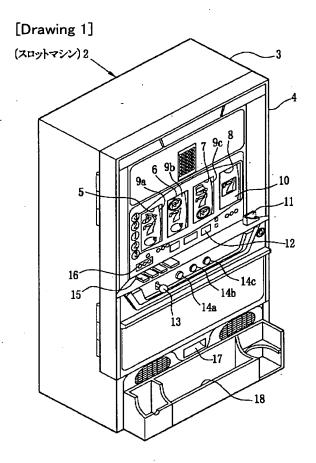
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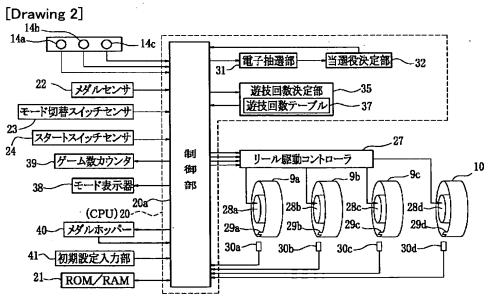
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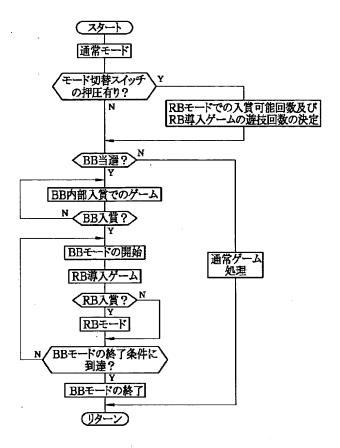
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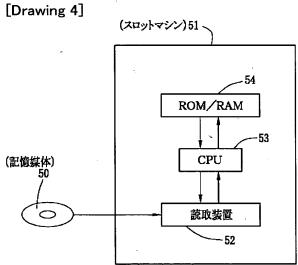
DRAWINGS





[Drawing 3]





[Translation done.]